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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/636,161	08/10/2000	SHUMIN WANG	98124X205487	6517

29050 7590 03/28/2003

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EXAMINER
UMEZ ERONINI, LYNETTE T

ART UNIT	PAPER NUMBER
1765	

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A21

Advisory Action	Application N .	Applicant(s)	
	09/636,161	WANG ET AL.	
	Examiner	Art Unit	
	Lynette T. Umez-Eronini	1765	

--Th MAILING DATE f this communication app ars on the c ver sheet with the correspond nce address --

THE REPLY FILED 13 March 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: *none*.

   Claim(s) objected to: *32-35*.

   Claim(s) rejected: *1-6,8,9 and 16-27*.

   Claim(s) withdrawn from consideration: *none*.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☒ Other: *Interview Summary, Paper No. 20*

Continuation of 5. does NOT place the application in condition for allowance because:

Applicant traverses the 103 rejection of claims 1, 3-6, 8, 9, and 16-27 as allegedly obvious over the Sasaki (US 5,770,095) in view of Kaufman (US 5,783,489). Applicant argues that it would not be obvious to substitute Kaufman's diphosphonic acid with Sasaki's phosphonic acids because: Neither of the cited references teaches or suggests Kaufman's phosphonic acids that are used as stabilizers would function as a film-forming agent as disclosed by Sasaki. In view of the functional, structural, and chemical-interaction differences between the phosphonic acids disclosed in Sasaki and Kaufman, one of ordinary skill in the art would not have expected the combination of the two references to succeed.

Applicant's arguments are unpersuasive because Kaufman is relied upon to teach Sasaki's deficiency, "(iii) at least one polishing additive that increases the rate at which the system polishes at least one layer of the substrate, wherein the polishing additive is selected from the group consisting of . . . diphosphonic acids . . ." in the present claim 1. Kaufman teaches, " . . . a variety of optional additives such as . . .stabilizers . . ." (column 6, lines 39-42). "Non limiting examples of preferred stabilizers useful in the CMP slurry of this invention include but are not limited to phosphonic acids such as aminotri(methylenephosphonic) acid and 1-hydroxyethylidene-4-diphosphonic acid (column 6, lines 49-55). "The addition of one of more phosphonic acids to the CMP slurry of this invention may also inhibit metallic corrosion (column 7, liens 14-16). Hence the aforementioned are examples of diphosphonic acids as claimed in the present invention. Since Kaufman uses the same diphosphonic acids in a polishing slurry as that of the claimed invention, then using Kaufman's polishing additive in polishing a layer on a substrate would inherently increase the rate at which the system polishes at least one layer of the substrate as claimed in the present invention.

Applicant traverses the reason to combine Sasaki and Kaufman. Applicant argues the Office Action fails to identify any motivation to Sasaki and Kaufman to arrive at the claimed invention.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the reason to combine is for the purpose of promoting stabilization of polishing slurry against settling, flocculating, an and decomposing (Kaufman, column 6, lines 39-42).

ROBERT KUNEMUND
PRIMARY EXAMINER